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for
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I thank the Little Hoover Commission for your invitation to address emergency preparedness. This hearing, in follow-up to the Commission's reports of January 2002 and May 2003, is focused on assessing the progress made by the State in emergency preparedness. You have asked for recommendations for practical steps that can be taken to immediately improve preparedness. Six recommendations are made.

The Kaiser Permanente Health Care Continuity Management Team is tasked with helping guide Kaiser Permanente in California and nationally with disaster preparedness. On October 24, 2002, a colleague on this team, Raymond Baxter, provided the Little Hoover Commission with testimony and our White Paper on Terrorism Preparedness. A few aspects of his testimony and our White Paper form a foundation for my present comments and recommendations.

Unfortunately several significant barriers identified in previous testimony remain in place. Communication stands as the most concerning barrier. For example, there is presently no cohesive statewide surveillance system which could, in a timely manner, alert public health authorities and practicing physicians of a bioterrorism event. If there were to be another outbreak of a new disease like SARS or a terrorism attack using biological agents, California's medical and public health system is not prepared to detect the outbreak in a timely manner. The key words in the latter sentence are "timely manner".

While the State's core ability to react to such an event, once detected, has clearly improved in the past two years, the speed of awareness of the event remains impeded. Depending on the scenario and biological agent, the speed of awareness of a bioterrorism attack could mean the difference in hundreds of thousands of lives saved or lost. While newer technologies such as air sampling hold great promise, these might not supplant practicing physicians and their patients as the "canaries in the mine" should a bioterrorism attack occur.

Recommendations:

1. Implement an Internet-based, state-wide, uniform, active electronic syndromic surveillance system that provides bidirectional communication between Emergency Department and other physicians, and Public Health authorities. The system should be able to be easily and quickly used by physicians.
2. To facilitate communications with physicians, collect, maintain, and use, up-to-date, voluntarily provided e-mail addresses of California physicians.

It is likely that the first sign of a bioterrorism event would be the arrival of isolated patients to disparate Emergency Departments. Initially a single physician would not realize that their individual patient was a victim of an attack. Nonetheless, if the physician has a mechanism for notifying public health authorities about his or her patient with one of a handful of undifferentiated, key syndromes, receipt of this and similar reports from divergent sources would enable public health authorities to become aware of a bioterrorism event in a timelier manner than possible at present. This reporting, requiring an active reporting act on the part of the physician of key syndromes, leads to the term active surveillance system

Similarly, if the Public Health authorities are able to actively notify clinicians of important events, such as a suspected outbreak or suspicious event, in a timely manner, these physicians would be more likely to correctly diagnose future patients. Only through Internet based communication and electronic mail, could optimal timeliness be achieved. Public Health authorities should ideally have the ability to push out to physicians critical information in a rapid manner. The ubiquity of computers, the Internet, and e-mail makes this immediately possible. Electronic communication with practicing physicians remains a modality that is underutilized by Public Health officials.

Kaiser Permanente has maintained a close working relationship with local Public Health Departments for many decades. Our laboratories work with the State for influenza surveillance. As another example, Kaiser Permanente reached out to one Northern California Public Health Department and implemented a pilot of an active Internet-based syndromic surveillance system. This pilot demonstrated the feasibility of active syndromic surveillance on a practical basis. In the face of busy daily practices, the extreme speed and ease of system use was critical to its acceptance by physicians. With the robust information technology already implemented within Kaiser Permanente Emergency Departments, we are eager to foster further state-wide collaboration with Public Health departments.

Recommendation:

3. Implement a uniform, state-wide, passive, electronic syndromic surveillance system, with frequent analysis of data.

Physician compliance with active surveillance systems remains a legitimate concern. Partially in recognition of this, a host of passive surveillance systems have been developed. These are data mining processes that receive information from selected medical facilities and physicians, based upon uniformly coded medical diagnoses, often batched into syndromic groups. The data is analyzed only once a day. The hope is that a "blip" in the data will be detected, signifying the possible occurrence of a disease outbreak or bioterrorism event.

One of the major flaws of passive systems is the difficulty of hearing the appropriate "signal" of a true event in the "noise" of all the background data. While a host of efforts are being directed at this issue, it is not clear that passive surveillance systems will perform as hoped in an actual event. It must be acknowledged that passive systems, along with most active systems, remain untested in most real-life events.

Despite these and other limitations, in the hope that inherent flaws can be adequately addressed in ongoing research efforts, and as testament to our desire for enhanced Public Health-private collaboration, Kaiser Permanente is reaching out to several large California counties to accept our data in a passive surveillance system originating from the Centers for Disease Control. Our efforts address the relevant issue of patient confidentiality. The analysis of data on only a daily basis impairs the timeliness of detections. It should be more frequent and ideally continuous.

Kaiser Permanente is heartened by the very recent outreach efforts of another California county whose Public Health authorities wish to use an alternative passive surveillance system developed by the U.S. Department of Defense.

An alphabet soup of surveillance systems, e.g. NDP, ESSENCE, RODS, etc exists. While each system has its advantages, disadvantages, and flaws, California is not well served by the implementation of disparate systems. Each Public Health department may be understandably leery of adopting any system with known flaws. However "perfect should not be the enemy of good". Adoption of a single statewide passive surveillance system would better serve the public's interest.

Recommendation:

4. Share and disseminate electronically the best emergency preparedness information to all Counties and to all appropriate private entities.

During the past two years, selected Public Health Departments in California have disseminated some superlative emergency preparedness educational material to their respective County's physicians and hospitals. Others have not. This State should not permit individual counties to be bereft of valuable Public Health information. One explanation might point to the variable funding of each Public Health Department. Yet in this era of electronic communication, the cost of sharing valuable information is essentially zero.

Recommendations:

5. Implement uniform, critical emergency preparedness systems across the State. Work to develop a common communication system for state inter-agency coordination in emergencies.
6. Break down all County-based administrative and procedural walls.

Other factors may have lead to such County by County variability.

There are sixty-one separate local and County Health Departments in the State. Historically Public Health Departments started and ended at each County's boundary lines. Bioterrorism and biological agents will not respect these boundary lines. The administrative structures inherited from a previous era will not best serve the Public's interests in the face of an inhalational anthrax attack. The Counties are burdened with administrative and procedural walls that will prevent the speedy awareness and response required. The State has inherited a County-based Public Health structure of enormous individual autonomy and authority. This structure serves several Public Health functions well. However, this may also be a reason why California does not presently have simple, clearly unified, standardized State-wide communication, surveillance, Emergency Medical, and command and control systems.

Approximately three years ago, internal attempts to unify the Counties to accept a uniform surveillance system were unsuccessful, and no consensus was achieved. Years later, the state remains without any uniform surveillance system in place.

The lack of single, uniform State-wide emergency preparedness systems, which cut across all County boundaries, is as dangerous to our citizens as was the use of different radio frequencies by the New York City Fire Department and Police during 9/11. The very nature of the threats of new disease outbreaks and bioterrorism requires that these historical County-based structures be put aside, so that the entire State can work as a single strong entity.